CLAIMS:

1. A method for forming a stabilized airlaid layer, comprising:
an airforming of a substantially unbonded fibrous layer, which is substantially free of active inter-fiber bonds, said fibrous layer including absorbent fibers and binder-fibers;
an exposing of said fibrous layer to high-frequency electromagnetic energy during an activation period of not more than a maximum of about 3 sec to activate said binder-fibers to provide said stabilized, airlaid layer.

2. A method for forming a stabilized airlaid layer, comprising:
an airforming of a substantially unbonded fibrous layer, which is substantially free of active inter-fiber bonds, said fibrous layer including substantially unbonded absorbent fibers and substantially unbonded binder-fibers which are substantially unbonded to one another;
an exposing of said fibrous layer to high-frequency electromagnetic energy during an activation period of not more than a maximum of about 3 sec to activate said binder-fibers to provide a stabilized, airlaid layer.

3. A method for forming an airlaid layer, comprising:
an airforming of a fibrous layer which includes absorbent fibers and binder-fibers, said absorbent fibers and binder-fibers arranged substantially free of active inter-fiber bonds, and said fibrous layer formed with a cross-directional width that substantially corresponds to a single-article dimension;
a moving of said fibrous layer at a fibrous layer speed of at least a minimum of about 0.5 m/sec;
an exposing of said fibrous layer to high-frequency electromagnetic energy during an activation period of not more than a maximum of about 3 sec to activate said binder-fibers to provide a stabilized, airlaid layer.

4. A method for forming an airlaid layer, comprising:
an airforming of a fibrous layer which includes absorbent fibers and binder-fibers;
a moving of said fibrous layer at a fibrous layer speed of at least a minimum of about 0.5 m/sec;

an exposing of said fibrous layer to high-frequency electromagnetic energy in a tuned activation chamber during an activation period of not more than a maximum of about 3 sec to thereby activate said binder-fibers to provide a stabilized, airlaid layer, said activation chamber operatively tuned to provide a reflected power value of not more than a maximum of about 50%.

5. A method for forming an airlaid layer, comprising:

an airforming of a fibrous layer which includes absorbent fibers and binder-fibers, said absorbent fibers and binder-fibers arranged substantially free of active inter-fiber bonds;

a moving of said fibrous layer at a fibrous layer speed of at least a minimum of about 0.5 m/sec;

an exposing of said fibrous layer to high-frequency electromagnetic energy in a tuned activation chamber to activate said binder-fibers and thereby provide a stabilized, airlaid layer, said activation chamber operatively tuned to provide a Q-factor of at least a minimum of about 200.

6. A method as recited in claim 5, wherein said exposing of said fibrous layer to high-frequency electromagnetic energy is configured to occur over an activation period of not more than a maximum of about 3 sec.

7. A method as recited in claim 5, wherein said exposing of said fibrous layer to high-frequency electromagnetic energy is configured to provide a reflected power of not more than about 50 %.

8. A method as recited in claim 5, further including a configuring of said binder-fibers to have a dielectric loss factor which is greater than a dielectric loss factor of said absorbent fibers.

9. A method for forming an airlaid layer, comprising:

an airforming of a fibrous layer which includes absorbent fibers and binder-fibers, said absorbent fibers and binder-fibers substantially free of active inter-fiber bonds, and said fibrous layer formed with a non-constant, contoured basis weight;

a moving of said fibrous layer at a fibrous layer speed of at least a minimum of about 0.5 m/sec;

an exposing of said binder-fibers to high-frequency electromagnetic energy during an activation period of not more than a maximum of about 3 sec to provide a stabilized, airlaid layer.

10. A method for forming a stabilized airlaid layer, comprising:

a providing of absorbent fibers with a fiberizer;

a directing of said absorbent fibers into a forming chamber;

an introducing of binder-fibers into said forming chamber by directing said binder-fibers into said forming chamber at an binder-fiber inlet location that is closely adjacent said fiberizer;

an airforming of a fibrous layer which includes a mixture of said absorbent fibers and binder-fibers, said absorbent fibers and binder-fibers arranged substantially free of active inter-fiber bonds;

a moving of said fibrous layer at a fibrous layer speed of at least a minimum of about 0.5 m/sec;

an exposing of said fibrous layer to high-frequency electromagnetic energy during an activation period of not more than a maximum of about 3 sec to thereby activate said binder-fibers to provide said stabilized, airlaid layer.

11. A method as recited in claim 10, wherein said introducing of binder-fibers into said forming chamber includes a directing of binder-fibers into said fiberizer.

12. A method as recited in claim 10, further including a directing of superabsorbent material into said forming chamber to mix with said absorbent fibers and binder-fibers.

13. A method as recited in claim 10, wherein said binder-fibers have been configured to have a dielectric loss factor of at least about 0.05.

14. A method for forming a stabilized airlaid layer, comprising:

an airforming of a fibrous layer which includes absorbent fibers and binder-fibers, said absorbent fibers and binder-fibers arranged substantially free of active inter-fiber bonds, said binder-fibers having a fiber length of at least a minimum of about 6 mm; and

an exposing of said fibrous layer to high-frequency electromagnetic energy during an activation period of not more than a maximum of about 3 sec to activate said binder-fibers to provide said stabilized, airlaid layer.

15. A method for forming an airlaid layer, comprising:

an airforming of a fibrous layer which includes absorbent fibers and binder-fibers;

a moving of said fibrous layer at a fibrous layer speed of at least a minimum of about 0.5 m/sec;

an exposing of said fibrous layer to high-frequency electromagnetic energy during an activation period of not more than a maximum of about 3 sec to activate said binder-fibers to provide a stabilized, airlaid layer;

a presenting of said stabilized layer at a setting temperature of not more than about 200 °C which is provided within a period of not more than about 3 sec after an ending of said exposing of the fibrous layer to high-frequency electromagnetic energy;

a debulking of said stabilized layer to increase a density thereof, said debulking occurring at a temperature that is not higher than said setting temperature.

16. A method for forming an airlaid layer, comprising:

an airforming of a fibrous layer which includes absorbent fibers and binder-fibers, said absorbent fibers and binder-fibers arranged substantially free of active inter-fiber bonds said fibrous layer having an average density of not more than a maximum of about 0.1 g/cm^3 , and an average basis weight of at least about 100 g/m^2 ;

an exposing of said fibrous layer to high-frequency electromagnetic energy during an activation period of not more than a maximum of about 3 sec to activate said binder-fibers and provide a stabilized, airlaid layer, said electromagnetic energy having a frequency of at least about 0.3 MHz;

a debulking of said stabilized layer to provide a debulked, stabilized layer having a relatively greater average density.

17. A method for forming an airlaid layer, comprising:

a providing of absorbent fibers from a fiberizer into a forming chamber;

an introducing of a metered amount of binder-fibers into said forming chamber by directing said binder-fibers into said forming chamber at an binder-fiber inlet location that is closely adjacent said fiberizer;

an airforming of an fibrous layer within said forming chamber, said fibrous layer including a mixture of said absorbent fibers and said binder-fibers, said absorbent fibers and binder-fibers arranged substantially free of active inter-fiber bonds;

a scarfing of said fibrous layer to provide

an average fibrous layer density of not more than a maximum of about 0.1 g/cm^3, and

a fibrous layer, basis weight of at least about 100 g/m^2 ;

a moving of said fibrous layer at a fibrous layer speed of at least a minimum of about 0.5 m/sec;

an exposing of said fibrous layer to high-frequency electromagnetic energy during an activation period of not more than a maximum of about 3 sec to thereby activate said binder-fibers and provide a stabilized, airlaid layer, said electromagnetic energy having a frequency of at least about 0.3 MHz;

a debulking of said stabilized layer to provide a debulked, stabilized layer having a relatively greater average density.

18. A method for forming an airlaid layer, comprising:

an airforming of a fibrous layer which includes absorbent fibers and binder-fibers, said absorbent fibers and binder-fibers arranged substantially free of active inter-fiber bonds;

a moving of said fibrous layer at a fibrous layer speed of at least a minimum of about 0.5 m/sec;

an exposing of said fibrous layer to high-frequency electromagnetic energy in a tuned activation chamber during an activation period of not more than a maximum of about 3 sec to activate said binder-fibers to provide a stabilized, airlaid layer, said electromagnetic energy having a frequency of at least about 0.3 MHz;

a tuning of said activation chamber to provide a Q-factor of at least about 200 when activating said binder-fibers, said tuning employing a variable geometry activation chamber:

19. A method for forming an airlaid layer, comprising:

a providing of absorbent fibers with a fiberizer;

a directing of said absorbent fibers into a forming chamber;

an introducing of a metered amount of binder-fibers into said forming chamber by directing said binder-fibers into said forming chamber at an binder-fiber inlet location that is closely adjacent said fiberizer, said metered amount of binder-fibers arranged to provide not more than about 30 wt% of said stabilized airlaid layer;

an airforming of a fibrous layer within said forming chamber, said fibrous layer including a mixture of said absorbent fibers and said binder-fibers, said absorbent fibers and binder-fibers arranged substantially free of active inter-fiber bonds, and said fibrous layer formed with a cross-directional width that substantially corresponds to a selected single-article dimension;

a scarfing of said fibrous layer to provide at least a portion of said fibrous layer with a basis weight of at least about 100 g/m^2 ;

a moving of said fibrous layer to provide a fibrous layer speed of at least a minimum of about 0.5 m/sec;

an exposing of said fibrous layer to high-frequency electromagnetic energy within a tuned activation chamber during an activation period of not more than a maximum of about 3 sec to activate said binder-fibers to provide a stabilized, airlaid layer, said electromagnetic energy having a frequency of at least about 0.3 MHz;

a tuning of said activation chamber to provide a Q-factor of at least about 200 when activating said binder-fibers, said tuning employing a variable geometry activation chamber and a variable impedance; and

a debulking of said stabilized layer to provide a debulked, stabilized layer having an average density of at least a minimum of about 0.05 g/cm^3 .

20. A method as recited in claim 19, further including a tuning of said activation chamber to provide a reflected power of not more than about 50 %.